

# **VICTORIANS' PARTICIPATION IN EXERCISE, RECREATION AND SPORT (2001-02)**



# CONTENTS



**Copyright rests with the State of Victoria**

The information in this report is supplied in good faith and derived from sources believed to be reliable, but no responsibility is accepted by the Department for Victorian Communities for the accuracy of any statement, opinion or advice contained in the text.  
Material from this report may be used for appropriate purposes. Acknowledgement would be appreciated.

If you require any further information please contact:  
Alun Breward  
Sport and Recreation Victoria  
(03) 9208-3333.

Minister's Message	4
Foreword	5
<b>Section One - Choices and Characteristics of Participants</b>	<b>6-10</b>
How we exercise	6
What sort of organised participation is most popular?	7
How paid work affects participation	8
The choices and characteristics of the frequently active	8
Sport and recreation as a source of social contact	10
<b>Section Two - A Regional Analysis</b>	<b>11-16</b>
Participation in Victoria's regions	12
The most popular activities	12
Regional participation in the top five activities	13
Patterns of participation according to Local Government Area	15
<b>Conclusion</b>	<b>16</b>
<b>Appendix 1; Local Government Areas and their Statistical Region</b>	<b>17</b>
<b>Appendix 2; The 40 most popular sports or recreations</b>	<b>17</b>
Glossary	18
References	18
Explanatory Notes	19





## Minister's Message

I am pleased to present the first in a series of publications on sport and recreation participation in Victoria.

This collaboration between Sport and Recreation Victoria and VicHealth provides an excellent example of the Government's objective of 'joined-up' services. But more than this, because sport and recreation is so important in the life of many Victorians, we believe the information in this report on Victoria's participation patterns will greatly assist communities.

A major *Growing Victoria Together* (GVT) goal is increased participation in community, cultural and recreational organisations. This report will help all people and organisations responsible for sport and recreation services to plan those services better, and to enhance sport and recreation's contribution to building more cohesive communities in Victoria.

This publication emerged on the back of a national Participation in Exercise, Recreation and Sport survey (ERASS) in 2001. Sport and Recreation Victoria (SRV) and VicHealth funded a major expansion of interviews to provide a more detailed and accurate picture of sport and recreation participation of Victorians, particularly in regional areas.

This publication analyses these statistics and identifies what activities are popular in which parts of the State, levels of activity in municipalities and factors that influence the frequency of participation. However it will not and could not provide a definitive picture of every aspect of participation that Victorians might want. Future surveys and feedback from readers such as you, will enable SRV and VicHealth to fine-tune their analysis of the ERASS data and ensure Victorians get the data they need.

Like all surveys, ERASS produces figures that are subject to error. This will decline over time, and it will be possible to speak with ever-greater authority about what is happening with sport and recreation participation in our State.

I am confident this publication will provide a solid foundation to increase understanding of sport and recreation participation, and result in significant improvements in our lives and communities.

Sport and Recreation Victoria and VicHealth would welcome any feedback you may have.

A handwritten signature in black ink, reading 'Justin Madden'.

Justin Madden  
Minister for Sport and Recreation



## Foreword

The Victorian Health Promotion Foundation has a major interest in participation in exercise, recreation and sport. Significant health benefits flow from increased physical activity and levels of social connection increase through participation. Social connection has an important positive impact on our mental health and wellbeing.

The Exercise, Recreation and Sport Survey is one of a number of surveys of participation in sport and physical recreation. It enables us to estimate how many Victorians participated during a 12-month period in activities such as those listed in Appendix 2. It is estimated that in 2001-02, 76 per cent or 2.9 million Victorians 15 years or older took part in such activities at least once. This survey enables study of many aspects of participation, such as the characteristics and choices of participants, and how these choices vary region by region. It represents the beginning of a concerted effort by VicHealth and Sport and Recreation Victoria to develop consistent and ongoing measurements of participation of exercise, recreation and sport. The development of an evidence base will be critical to inform future investment and ensure we maximise returns in the effort to increase Victorians' participation rates.

**Dr Rob Moodie**  
CEO VicHealth





## CHOICES AND CHARACTERISTICS OF PARTICIPANTS



With the capacity of ERASS to provide reliable, detailed information, SRV and VicHealth have made it a priority to look closely at who participates in sport and physical recreation and the preferences of participants.

### How we exercise

**Table 1:** Choices of active Victorians - organised and unstructured participation in sport and physical recreation

Statistical Region	Organised participation only	Unstructured participation only	Both forms of activity	All forms of participation
(% of population)				
<b>Melbourne</b>	14.6	38.0	24.3	76.9
Outer Western	13.9	35.4	20.4	69.7
North Western	21.4	36.2	15.6	73.3
Inner	7.5	38.8	32.7	79.0
North Eastern	16.1	35.7	25.1	76.9
Inner Eastern	14.0	41.0	28.7	83.7
Southern	13.6	42.0	25.9	81.6
Outer Eastern	14.7	37.1	25.1	76.8
South Eastern	15.2	37.3	17.9	70.4
Mornington	15.9	37.9	25.5	79.3
<b>Regions</b>	18.2	32.7	22.7	73.6
Barwon/Western	16.6	36.4	22.1	75.1
Central Highlands	17.0	29.2	20.3	66.4
Loddon/Mallee	17.2	33.1	25.3	75.5
Goulburn/Ovens	21.0	30.3	21.1	72.3
All Gippsland	19.4	32.8	24.7	76.9
<b>VICTORIA</b>	<b>15.5</b>	<b>36.6</b>	<b>23.8</b>	<b>76.0</b>

Table 1 shows the composition of total participation in each of the Australian Bureau of Statistics (ABS) Statistical Regions (listed on page 11). It highlights whether individuals exercise in a setting organised by a club or business and shows the importance of club-based and other organised activity for the active population.

However, as other sport and recreation research has noted<sup>1</sup>, when organised activity is high, there is a tendency for overall participation to be low. All of the regional areas of Victoria (and NW Melbourne) have an above-average proportion of their population whose sole activity occurs in an organised setting. These regions' overall participation rate is generally low. Regions where this pattern is less evident include Mornington, Gippsland and North Eastern Melbourne.

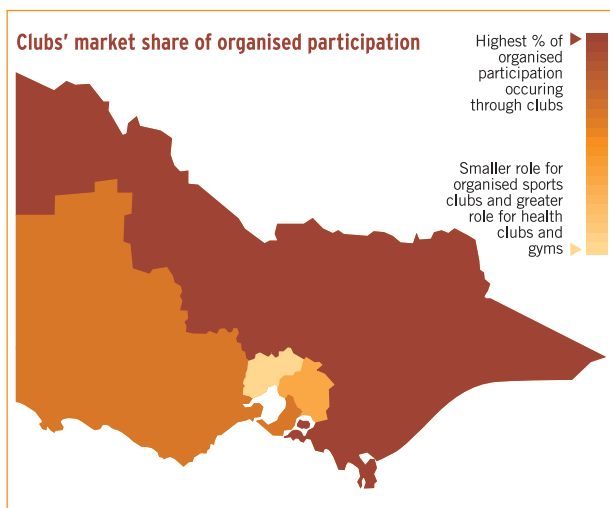
The interaction between unstructured sport and recreation and organised sport and recreation will be discussed further in coming sections.

## What sort of organised participation is most popular?

Of the components of total participation examined in this section, organised participation is arguably the most important. It not only helps people be physically active, but also can play a major role in communities. Sporting clubs (not for profit organisers of sport and recreation) are crucial in this regard. As a result, the role of sporting clubs warrants attention.

The map below shows in dark shades those areas with the highest percentage of organised participation occurring through clubs. Progressively lighter shades indicate a smaller role for clubs in organised sport and a greater role for health clubs and gyms.

**Map 1:** Clubs' market share of organised participation



Clubs are most important in regional Victoria, especially in the Loddon/Mallee (north) and the Goulburn/Ovens (north east). However they are major providers across the State. It is in the metropolitan area that other providers of organised sport - health clubs and gyms, have a greater role. In the northern and western suburbs these recently-arrived providers of organised sport come close to rivalling clubs in importance.

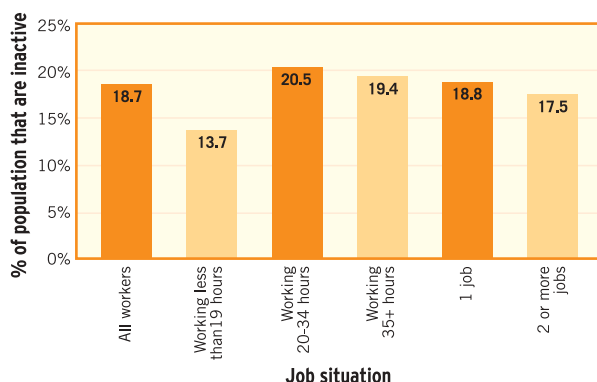
**A key distinction that is made throughout the publication is between organised participation and unstructured participation. Reference to organised participation means activity that occurs through a club, association, fitness centre or school. Unstructured participation means activity that is not organised. The survey does not count coaches or officials as participants.**



## How paid work affects participation

Beyond the issue of what types of sport and recreation active people prefer, there is an equally important matter - which groups of the population tend to be active and which do not? Chart 1 looks at the role that a person's work situation has in whether they participate and subsequent sections will look at the effects of factors such as gender and household type.

**Chart 1:** Influences on the decision to participate; work situation



The inactivity rate of those working one job (18.8 per cent) or two or more jobs (17.5 per cent) is very similar to that of the workforce overall (19.4 per cent). Those working more than 20 hours behave in ways similar to the rest of the workforce.

The contrast between those who work less than 19 hours and the rest of the workforce looks more substantial. However the majority of people working these hours are aged under 34<sup>2</sup> - an age group where part-time work is common. Allowing for the influence of age, however, the inactivity rate of those working under 19 hours is still less than other groups.

The amount of time away from work influences how active people are.

## The choices and characteristics of the frequently active

For various reasons, including the complexity of measuring those aspects of physical activity that improve health<sup>3</sup>, ERASS provides only some help in analysing the benefits of exercise. The survey classifies a person as a participant whether they did one session of exercise in the previous year or 100 sessions. So although 76 per cent of Victorians are active, this is not much guide to the individual and community health benefits that sport and recreation can provide.

As an aid to measuring the health effects of sport and recreation participation, ERASS collects data on the frequency of participation (ie the number of sessions of activity yearly).

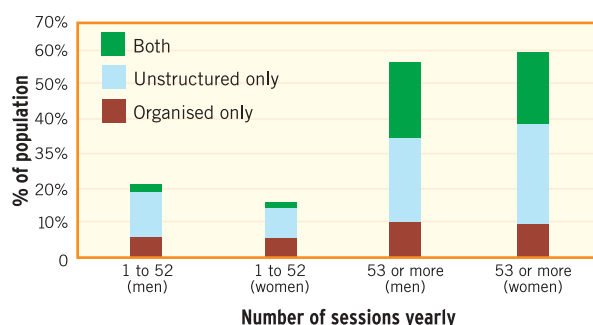
Looking across various groups of the Victorian community and examining the frequency of participation gives important added insight into grassroots participation.

The following charts demonstrate a pattern not previously recognised. Those who are active (on average) weekly, often participate in both organised sport and recreation and unstructured sport and recreation. However, those who get exercise on a less regular basis tend to be in two camps. The larger group participates in organised activity only; the smaller group does unstructured sport and recreation.

It is rare to find people who do both organised activity and unstructured activity amongst those who are active less than once a week.

### Frequency of activity and gender

**Chart 2:** Influences on the frequency of participation; gender

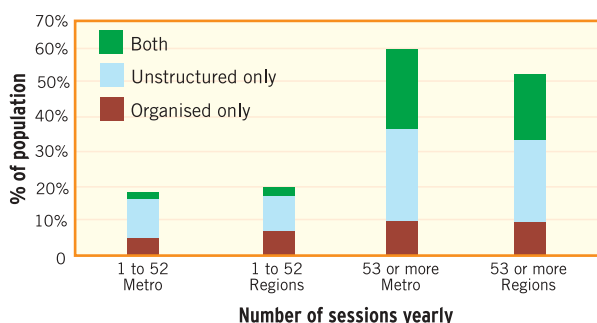




Data on the frequency of participation by men and women again demonstrate that people exercising once weekly or less, rarely do both organised and unstructured activity. It is also evident that although a greater proportion of men participate in sport and recreation, they are less active than women measured by frequency of activity.

### Frequency of activity and place of residence

**Chart 3:** Influences on the frequency of participation; place of residence

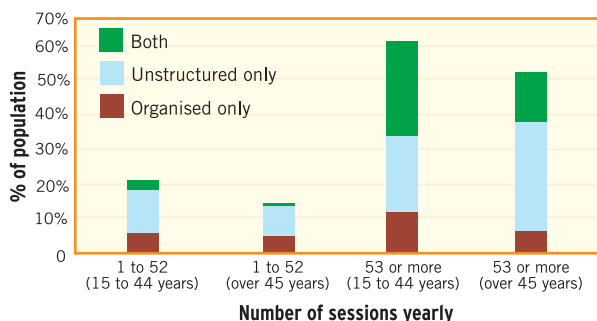


Total Participation Metro 77%, Regional 74%

In terms of frequency of activity, regional Victorians lag behind Melburnians. Chart 3 also shows the familiar pattern of relatively inactive people choosing either unstructured or organised activity, but rarely both.

### Frequency of activity and age

**Chart 4:** Influences on the frequency of participation; age



NB: of those aged 15 to 44 years, 82.8% participated; amongst those 45 years or older 67.7% participated

Analysis of participation and its frequency by age provides the clearest evidence of the gulf between the intermittently and more regularly active. Victorians getting 1 to 52 sessions of activity yearly choose either organised settings or unstructured ones. Involvement in both organised and unstructured activity is much more common amongst those managing 53 or more sessions yearly.

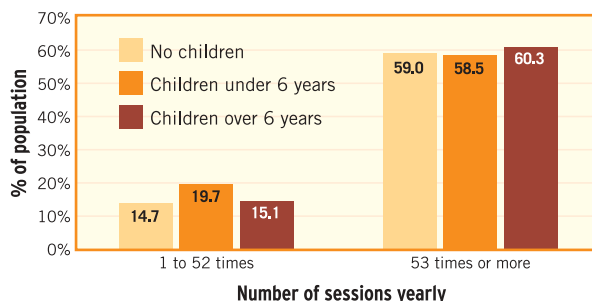
### Frequency of activity and household type

Examining very large sectors of the population gives limited insight into participation. ERASS also enables study of more specific groups in the community, and SRV and VicHealth identified households with children as a priority area for investigation.

Data from ERASS on household type have revealed that people with children are more active than others. Of people from households with children, 78 per cent were active versus 75 per cent of those from households without children. This is probably due to households without children encompassing many aged Victorians, whose participation levels are low. However the most notable aspect of household type's impact on participation is in frequency.

As Chart 5 and 6 show, those with children may be active, but when it comes to frequency of activity, they struggle. This is particularly an issue for men. Women from households with children under six are more likely than other women to undertake 52 sessions of exercise or less a year. Men from households with children are more likely to be relatively inactive than other men.

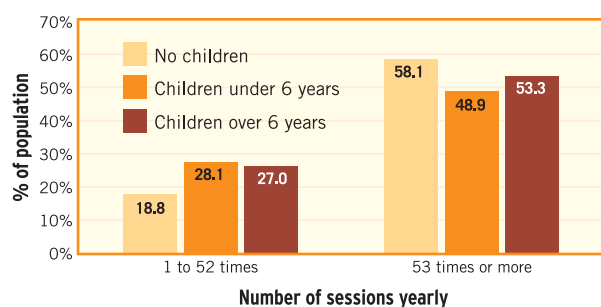
**Chart 5:** Influences on the frequency of women's participation; household type



NB: of women from households with no kids, 73.7% participated; 78.2% of women from households with kids under six years of age participated and 75.4% of other women were active



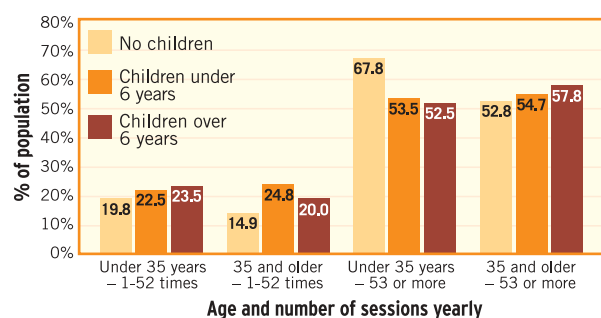
**Chart 6:** Influences on the frequency of men's participation; household type



NB: of men from households with no kids, 76.9% participated; 77% of men from households with kids under six years of age participated and 80.4% of other men were active

The next chart suggests when the householders with young children are 35 years or older, the frequency of participation is particularly low.

**Chart 7:** Influences on the frequency of participation; person's age and household type



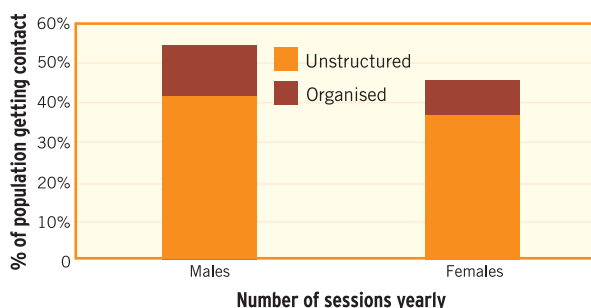
## Sport and recreation as a source of social contact

In addition to the health benefits of recreation, which make it important to understand the frequency of activity, awareness is growing of the importance of sport to community life. Sport and recreation provide opportunities to make and maintain friendships and can help to give a sense of belonging. Both of these aspects are important to a person's mental health and well-being. Given there is little data on this dimension of sport and recreation, SRV and VicHealth have investigated.

The following chart shows at a conservative estimate 55 per cent of Victorian men (ie 71 per cent of participants) get social contact through sport and recreation. For Victorian women it is 45 per cent (60 per cent of participants). This means sport provides social activity as well as physical activity for just under half of all Victorians aged 15 and over.

Overwhelmingly this occurs through organised sport. Somewhat unexpectedly, men also get a substantial portion of social contact through unstructured sport and recreation. This reflects their higher participation rates in sports or recreations that require at least two to play. Although there is little difference between men's and women's participation in unstructured activities, women tend to favour those like walking and swimming that can be done alone.

**Chart 8:** The effects of exercise; social contact via organised and unstructured group activity



Any participants in organised sport or in unstructured activities requiring a co-participant are regarded in this publication as getting social contact through sport and recreation. As this excludes very popular unstructured activities such as walking and golf, the resulting estimate of persons getting social contact is conservative.

## A REGIONAL ANALYSIS

### Introduction

This section provides a regional analysis of the data collected through the ERASS survey. Participation in sport and recreation by region is revealed, as is the level of participation by people within regions in each of the activities – walking, swimming, cycling, tennis and aerobics.

To assist you in reading the graphs and making comparisons between regions in this section we have assigned a color to each statistical region as shown in the key below. We have also shown where that region lies in Victoria by assigning the same colors to each region in the map of Victoria below.

#### KEY: Victoria's Statistical Regions

Region	Abbreviation for Charts 10-14
All Gippsland	R-AllGipp
Barwon - Western District	R-BarwWest
Central Highlands	R-CentHigh
Goulburn - Ovens - Murray	R-GoulOven
Inner Eastern Melbourne	M-InnerEast
Inner Melbourne	M-InneMelb
Loddon - Mallee	R-Lodd Malle
Mornington Peninsula	M-MornPeni
North Eastern Melbourne	M-NortEast
North Western Melbourne	M-NortWest
Outer Eastern Melbourne	M-OuteEast
Outer Western Melbourne	M-OuteWest
South Eastern Melbourne	M-SoutEast
Southern Melbourne	M-SoutMelb
VICTORIA	



It is not possible, at least at this time, to perform, region by region, the analysis of the previous section. However, at the regional level, reliable data are available about the overall participation behaviour of Victorians.

## Participation in Victoria's regions

The following table sets out rates of participation in Victoria's regions. This is a local first and shows the diversity of sport and recreation participation across the State. Some issues emerge.

Firstly, regions where participation is above the Victorian participation rate of 76 per cent tend to be in Melbourne. Of the five Statistical Regions covering rural Victoria, only Gippsland's participation rate is above average. Only three of the nine Melbourne Statistical Regions are below the State average. The participation rate for Melbourne overall is 77 per cent versus 74 per cent in regional Victoria. The Australian Sports Commission (ASC) publication on the ERASS nationwide results for 2001 shows the same physical activity gap between capital cities and the rest of Australia<sup>4</sup>.

**Table 2:** Participation in sport and recreation in Victoria's Statistical Regions

Statistical Region	% of Population
Inner Eastern Melbourne	83.7
Southern Melbourne	81.5
Mornington Peninsula	79.3
Inner Melbourne	79.0
North Eastern Melbourne	76.9
All Gippsland	76.9
Outer Eastern Melbourne	76.8
Loddon/Mallee	75.5
Barwon/Western	75.1
North Western Melbourne	73.3
Goulburn/Ovens	72.3
South Eastern Melbourne	70.4
Outer Western Melbourne	69.7
Central Highlands	66.4
<b>VICTORIA</b>	<b>76.0</b>

Secondly there are substantial contrasts in participation rates between neighbouring parts of the State. Southern Melbourne and South Eastern Melbourne are 10 km apart, yet 82 per cent of people in the former are active versus 70 per cent in the latter.

The reason for this variation is unclear, but further investigation should improve knowledge of what influences participation in specific areas.

## The most popular activities

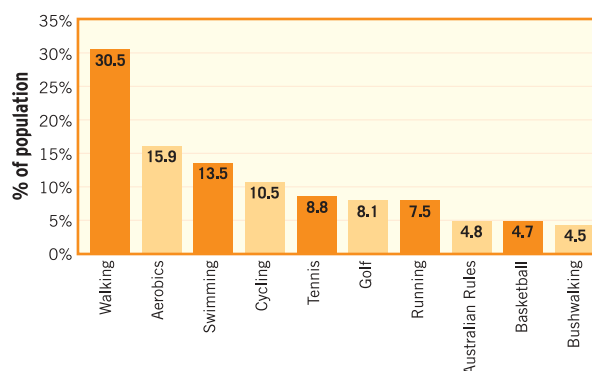
**Table 3:** The 10 most popular activities

Victoria – activity	Participants (000s)	% of population	Unstructured activity only (000s)	% of population
<b>Walking</b>	1,177	30.5	1,144	29.6
<b>Aerobics</b>	614	15.9	288	7.5
<b>Swimming</b>	519	13.5	417	10.8
<b>Cycling</b>	404	10.5	371	9.6
<b>Tennis</b>	339	8.8	153	4.0
<b>Golf</b>	314	8.1	147	3.8
<b>Running</b>	291	7.5	257	6.7
<b>Australian Rules</b>	184	4.8	54	1.4
<b>Basketball</b>	180	4.7	45	1.2
<b>Bushwalking</b>	172	4.5	140	3.6

The table ranks the 10 top activities out of the 75 for which ERASS collected data. As many people do multiple activities, these numbers do not represent individual people – they show participants in specific activities.

The top 10 activities have an important characteristic – in many cases participation in them is unstructured. The bulk of people doing aerobics, golf, tennis, Australian Rules and basketball participated in an organised setting. But across the top 10, the significance of unstructured participation is clear. Unstructured and organised activities and the role that each plays in the overall sport and recreation sphere will receive further attention later in the publication.

**Chart 9:** Participants in the top 10 activities

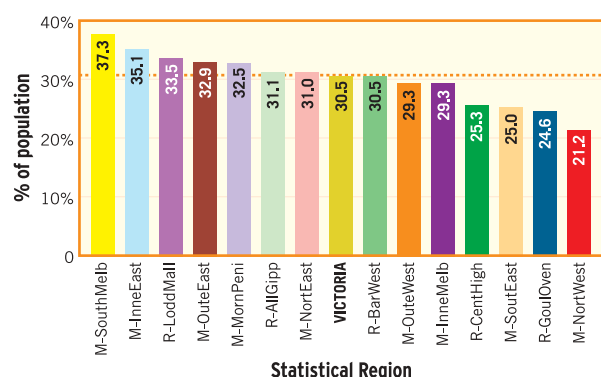


## Regional participation in the top five activities

Given that Melburnians are more active than other Victorians, one would expect lower participation in specific activities in regional Victoria<sup>5</sup>. The charts 10-14 look at each of the top five activities and the proportion of people in each Statistical Region that participate in them. The region with the highest participation rate appears on the left of each chart; that with the lowest participation rate appears on the right. Largely these charts confirm that participation in these most popular activities is relatively low in regional Victoria.

### Walking

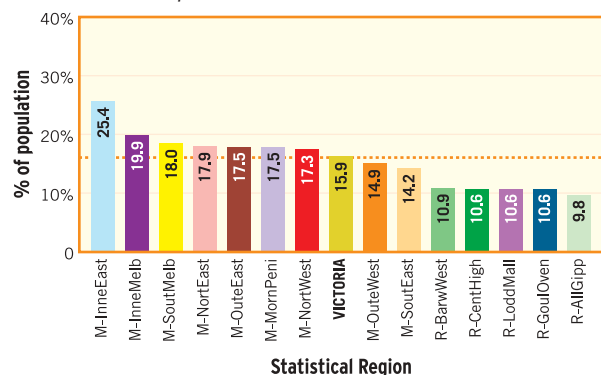
**Chart 10: Participants in walking**



In contrast to others of the top five activities, walking is one activity where some regional Victorians are amongst the most active in the State. The Loddon/Mallee and Gippsland regions are both above the State average. However, there is substantial variation in participation rates across the 14 regions, suggesting substantial room for participation growth in some parts of Victoria. In this, walking is similar to other top five activities, particularly swimming and to a lesser degree cycling.

### Aerobics

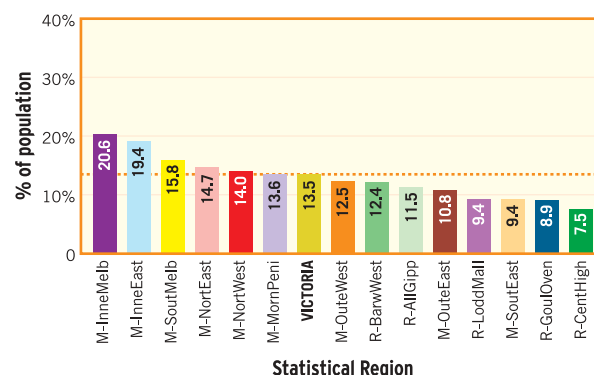
**Chart 11: Participants in aerobics**



The notable feature of participation in aerobics is that it has a two-tier popularity structure. Although Inner Melbourne, Inner Eastern Melbourne and some fringe metropolitan regions do not fit the pattern, most of Melbourne's regions show participation in aerobics of about 17 per cent. All the regions of Victoria outside Melbourne have a participation rate of around 11 per cent.

### Swimming

**Chart 12: Participants in swimming**

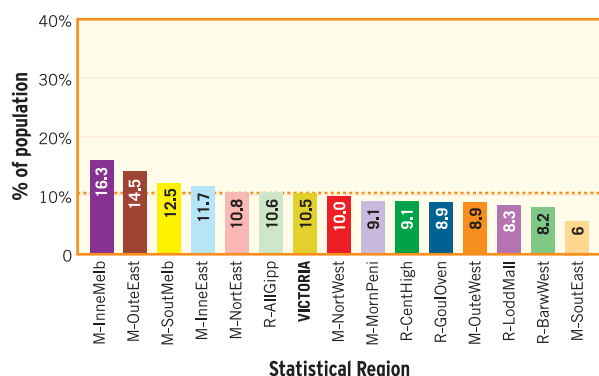


The chart for swimming participation across the regions resembles the chart for walking, with nearly the same spread of participation rates. This chart indicates a difference of about 11 per cent between the regions at the top end and the regions at the bottom end of the participation rate ranking. Some parts of Melbourne favour swimming much more than adjoining areas, and there is substantial variation between rural regions.



## Cycling

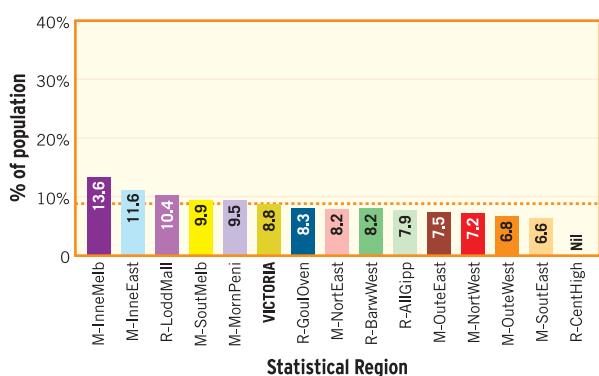
**Chart 13:** Participants in cycling



The regional participation profile for cycling (like the profile for walking and swimming) has a large gap between participation rates in its most popular and least popular region. However, like aerobics, most of the regions of rural Victoria feature at the lower end.

## Tennis

**Chart 14:** Participants in tennis



Tennis participation is somewhat similar to cycling, with a sizeable gap between the usual high participation regions of inner and east Melbourne and low participation regions (eg Central Highlands)<sup>6</sup>. However there is a degree of uniformity of participation rates across regional Victoria.

## What do the top five activities tell us?

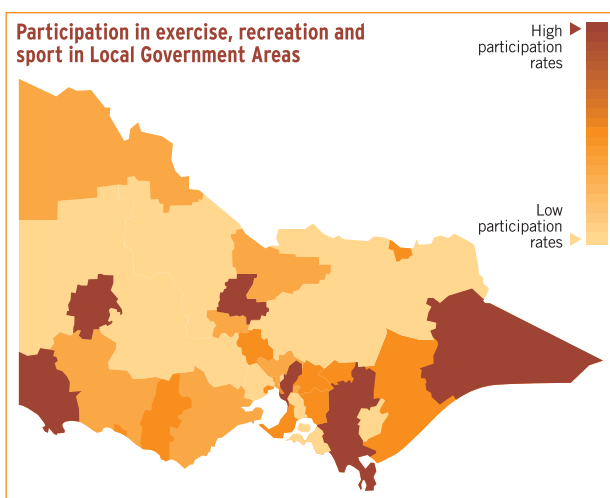
Overall, this initial look at Victorians' preferences for specific top five activities suggests that if organised activity is strong (see Table 3 on page 12), participation rates vary little region by region. This is especially the case in regional Victoria. If this pattern recurs in future ERASS data it would seem appropriate to investigate further and assess its implications.



## Patterns of participation according to Local Government Area

Although it is not possible to look at participation in specific activities at a more detailed level, reliable data are available on overall participation in Victoria's municipalities. This is mapped below.

**Map 2:** Participation in exercise, recreation and sport in Local Government Areas



Perhaps the most obvious element is a north-south divide in participation, and to a lesser extent an east-west divide. The south east of the State clearly has the most active population, whereas the north-west of the State has relatively low levels of participation.

Within Melbourne the same divisions apply. With the exception of areas north of Westernport, eastern and southern Melbourne are high participation areas. In the metropolitan west and north participation rates are lower.

Looking beyond those contrasts, participation rates in regional centres deserve comment. Some regional centres (eg Bendigo, Horsham, Mildura, Warrnambool and Wodonga) are islands of high participation. However, centres such as Ballarat, Geelong, Shepparton, and Wangaratta have participation rates that differ little from surrounding areas. The LGA of La Trobe City has participation rates lower than nearby areas.

Investigation of participation in municipalities that have dramatically different participation rates from their neighbours may help develop insights into what influences participation rates.





## Conclusion

The inaugural “Victorians’ Participation in Exercise, Recreation and Sport” publication has addressed issues that commonly feature in publications on participation in sport and recreation, such as which sports are most popular.

But it has also ventured into new terrain and tackled issues such as the diversity of participation across the State and how sport and recreation might contribute to the health, not only of individuals, but also the community.

Our knowledge has improved in a number of areas where evidence and understanding were at best patchy. The statistics behind this publication indicate Melburnians and other Victorians approach sport and recreation in different ways. For people in regional Victoria, sport and recreation are strongly connected with clubs, and as such are probably much more social activities than they are for Melburnians.

The evidence suggests a greater proportion of Melburnians participate in sport and recreation, and that Melburnians participate more frequently than other Victorians. While this is likely to entail clear health advantages for them, the way they choose to participate may not deliver the social benefits that sport and recreation bring to rural Victoria.

Regardless of where Victorians live, the first year of this SRV/VicHealth collaboration has also highlighted the particular needs of people with young children. Although many are active, frequent exercise is clearly a challenge. As well as having health implications, this may mean they are somewhat socially isolated and potentially impact on their mental health and well-being.

The next publication covering 2002-03 may address many of the same issues this edition covers, or feedback may steer it into different territory. Either way, knowledge about sport and recreation participation in Victoria will remain the best in Australia.



## Appendix 1: Local Government Areas and their Statistical Region

Alpine (S) - R-GoulOven	Mornington Peninsula (S) - M-MornPeni
Ararat (RC) - R-CentHigh	Mount Alexander (S) - R-LoddMall
Ballarat (C) - R-CentHigh	Moyne (S) - R-BarwWest
Banyule (C) - M-NortEast	Murrindindi (S) - R-GoulOven
Bass Coast (S) - R-AllGipp	Nillumbik (S) - M-NortEast
Baw Baw (S) - R-AllGipp	Northern Grampians (S) - R-CentHigh
Bayside (C) - M-SoutMelb	Port Philip (C) - M-InneMelb
Boroondara (C) - M-InneEast	Pyrenees (S) - R-CentHigh
Brimbank (C) - M-OuteWest	Queenscliffe (B) - R-BarwWest
Buloke (S) - R-LoddMall	South Gippsland (S) - R-AllGipp
Campaspe (S) - R-GoulOven	South Grampians (S) - R-BarwWest
Cardinia (S) - M-SoutEast	Stonnington (C) - M-InneMelb; M-SoutMelb
Casey (C) - M-SoutEast	Strathbogie (S) - R-GoulOven
Central Goldfields (S) - R-LoddMall	Surf Coast (S) - R-BarwWest
Colac-Otway (S) - R-BarwWest	Swan Hill (RC) - R-LoddMall
Corangamite (S) - R-BarwWest	Towong (S) - R-GoulOven
Darebin (C) - M-NortEast	Wangaratta (RC) - R-GoulOven
Delatite (S) - R-GoulOven	Warrnambool (C) - R-BarwWest
East Gippsland (S) - R-AllGipp	Wellington (S) - R-AllGipp
Frankston (C) - M-MornPeni	West Wimmera (S) - R-CentHigh
Gannawarra (S) - R-LoddMall	Whitehorse (C) - M-InneEast
Glen Eira (C) - M-SoutMelb	Whittlesea (C) - M-NortEast
Glenelg (S) - R-BarwWest	Wodonga (RC) - R-GoulOven
Golden Plains (S) - R-BarwWest	Wyndham (C) - M-OuteWest
Greater Bendigo (C) - R-LoddMall	Yarra (C) - M-InneMelb
Greater Dandenong (C) - M-SoutEast	Yarra Ranges (S) - M-OuteEast
Greater Geelong (C) - R-BarwWest	Yarriambiack (S) - R-CentHigh
Greater Shepparton (C) - R-GoulOven	
Hepburn (S) - R-CentHigh	
Hindmarsh (S) - R-CentHigh	
Hobson's Bay (C) - M-OuteWest	
Horsham (RC) - R-CentHigh	
Hume (C) - M-NortWest	
Indigo (S) - R-GoulOven	
Kingston (C) - M-SoutMelb	
Knox (C) - M-OuteEast	
Latrobe (C) - R-AllGipp	
Loddon (S) - R-LoddMall	
Macedon Ranges (S) - R-LoddMall	
Manningham (C) - M-InneEast	
Maribyrnong (C) - M-OuteWest	
Maroondah (C) - M-OuteEast	
Melbourne (C) - M-InneMelb	
Melton (S) - M-OuteWest	
Mildura (RC) - R-LoddMall	
Mitchell (S) - R-GoulOven	
Moirā (S) - R-GoulOven	
Monash (C) - M-InneEast	
Moonee Valley (C) - M-OuteWest	
Moorabool (S) - R-CentHigh	
Moreland (C) - M-NortWest	

## Appendix 2: The 40 Most Popular Sports or Recreations

(000s OF PARTICIPANTS)

1	Walking	1176.9
2	Aerobics/fitness	613.9
3	Swimming	519.2
4	Cycling	403.6
5	Tennis	339.4
6	Golf	313.7
7	Running	290.6
8	Australian Rules football	183.8
9	Basketball	180.1
10	Walking (bush)	172.0
11	Netball	164.1
12	Cricket (outdoor)	124.9
13	Soccer (outdoor)	90.2
14	Yoga	79.0
15	Squash/racquetball	78.5
16	Dancing	78.4
17	Martial arts	73.4
18	Ice/snow sports	61.6
19	Lawn bowls	61.5
20	Fishing	59.9
21	Surf sports	58.0
22	Soccer (indoor)	57.1
23	Weight training	49.9
24	Volleyball	49.8
25	Horse riding/equestrian	49.5
26	Cricket (indoor)	41.9
27	Orienteering	40.9
28	Waterskiing/powerboating	40.6
29	Motor sports	36.1
30	Roller sports	35.0
31	Badminton	34.1
32	Table tennis	33.0
33	Sailing	28.8
34	Athletics/track and field	28.3
35	Hockey (outdoor)	28.0
36	Tenpin bowling	27.9
37	Aquarobics	25.2
38	Rock climbing	18.1
39	Rowing	17.5
40	Shooting sports	17.0

## GLOSSARY

(reprinted with permission of the Australian Sports Commission)

### **Aerobics/fitness**

Includes callisthenics, Chinese exercise, exercise bike, gymnasium work-outs, military exercise, prime movers for over 50s and Step Reebok.

### **Cycling**

Includes BMX and mountain bike riding.

### **Employed full-time**

Persons employed full-time are those who usually work 35 hours or more a week (in all jobs).

### **Employed part-time**

Persons employed part-time are those who usually work less than 35 hours a week (in all jobs).

### **ERASS**

The Participation in Exercise, Recreation and Sport survey.

### **Fitness organisation**

A fitness, leisure or indoor sports centre that required payment for participation.

### **Inactivity rate**

The percentage of a population or group that do not participate in exercise, recreation or sport.

### **Labour force**

All persons who are in work for pay or payment in kind, plus those who are seeking work.

### **Married**

Those who describe their marital status as being married or in a de facto relationship.

### **Median**

The median represents the centre or midpoint of the data. Half the data will have values less than the median, half will have values greater than the median.

### **MSD**

Melbourne Statistical Division (see also RoV).

### **Not in the labour force**

Persons who did not have a job when interviewed and did not look for work in the four weeks prior to interview.

### **Not married**

Those who describe their marital status as being either separated, divorced, widowed or never married.

### **Organised sport and physical activities**

Those organised in full or in part by a club, association or other type of organisation.

### **Participation rate**

For any group, this is the number of persons who participated in the activity, expressed as a percentage of the population in the same group.

### **RoV/Rest of Victoria**

The whole of Victoria less the Melbourne Statistical Division.

### **RSE**

Relative standard error.

### **SE**

Standard error.

### **Social contact**

Contact with other people that arises in the context of organised sport and recreation or in unstructured activity that requires the joint participation of at least two people (eg tennis).

### **Sport organisation**

Sport or recreation club or association that required payment of membership, fees or registration.

### **Swimming**

Includes board diving.

### **Unemployed**

Persons who did not have a job when interviewed and looked for work in the four weeks prior to interview.

### **Unstructured activity**

All activity that takes place without input from a sporting club, association, health club or gym.

### **Walking**

This category excludes bushwalking, which is reported separately.

### **Workforce**

Persons who work one hour a week or more for pay, or payment in kind.

## References

1. Sport and Recreation Regional Markets Studies, South Western Region (SRV, 2001) and work on the Drivers of Participation by the National Institute of Economic and Industry Research (1999, unpublished)
2. See ABS catalogue number 6344.3, Table 2
3. Several sessions of exercise weekly that increase the heart rate, or improve muscle strength or flexibility (on a sustainable basis) are generally recognised as improving a person's overall health. In recent years a consensus has emerged in government and academia that social contact and a sense of community are important to the overall health of society. Sport and recreation clearly has a role in providing such social benefits.
4. The ASC publication can be downloaded at <http://www.activeaustralia.org/facts/ERASS.pdf>. The table that shows how participation rates differ between capital cities and other regions is on page 5.
5. A map of Victoria's Statistical Regions on page 11.
6. Participation in tennis in the Central Highlands/Wimmera region is such a low proportion of the overall population that accurate estimation of participants is hard. It may be 6 per cent of the population.





## EXPLANATORY NOTES

(reprinted with permission of the Australian Sports Commission)

### Introduction

The Exercise Recreation and Sport Survey (ERASS) collects information on participation in physical activity for exercise, recreation and sport by Victorians. Participation is restricted to active 'playing' participation and does not include non-playing participation such as coaching, refereeing and spectating or activities that are related to work or household chores. Practice and training activities are included.

The survey is conducted quarterly, with the fieldwork undertaken by ACNielsen Research. Results from four quarterly surveys conducted in August and November 2001, and February and May 2002 were aggregated to produce this publication.

The survey is funded by the Australian Sports Commission, State/Territory Departments of Sport and Recreation, and VicHealth.

### Scope

The Survey collects information on persons who participated in exercise, recreation and sport in the 12 months prior to interview. The scope of the survey was all persons aged 15 years and over.

### Methodology

All interviews were conducted by telephone using ACNielsen's Computer Assisted Telephone Interviewing (CATI) system. The sample was selected from the Electronic White Pages, and one person was randomly selected per dwelling to complete the interview.

The sample design is a random survey where the sample size is 1,375 per quarter, with an annual sample of 5,500.

### Questionnaire

The questionnaire (which along with a comparable ASC publication is available at

<http://www.activeaustralia.org/facts/ERASS.pdf>) covers two main areas:

- Physical activity over the past 12 months in up to 11 different activities, and for each type of activity determining whether it was organised by a club or association, the type of club or association and the number of times that activity was engaged in over the past 12 months; and
- Demographics - covering sex, age, marital status, number and age of children, educational qualifications, employment status and postcode.

### Comparability of the data

The survey has been conducted since 2000.

The ERASS is not comparable with the data collected through other surveys of participation in physical activity.

In particular, the data cannot be directly compared with participation surveys conducted by the ABS (eg Population Survey Monitor) and by Sweeney Sports (Sweeney Research). This is due to differences in the scope, methodology and questionnaire design of the various surveys.

### Standard errors, and relative standard errors

Since the estimates presented in this publication are based on information obtained by persons from a sample of households, selected randomly by telephone number, they are subject to sampling variability. This means they may differ from those that would have been produced if all households had been included in the survey.

One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of households was included. There are about two chances in three (67 per cent) that a sample estimate will vary by less than one SE from the number that would have been obtained if all households had been included. There are about 19 chances in 20 (95 per cent) that the difference will be less than two SEs.

Another measure of the likely difference is the relative standard error (RSE) which is obtained by expressing the SE as a percentage of the estimate. The RSE is a useful measure in that it provides an indication of the relative accuracy of the estimate.

#### Relative Standard of Error

Estimate	Standard Error	Relative Standard Error (%)
1,000	900	89
2,000	1,300	64
5,000	2,100	41
10,000	2,800	28
20,000	3,800	19
50,000	5,600	12
100,000	7,400	8
200,000	9,500	5
500,000	13,000	3
800,000	15,000	2
1,000,000	16,100	2
1,500,000	18,100	2
2,000,000	19,700	1

The table above gives SE and RSE information relating to estimates in this publication. Please note that where the Relative Standard Error reaches 25 per cent (which in this publication is at an estimate of approximately 13,000) the relevant estimate is considered by statisticians to be too unreliable for general use.



VicHealth